

FRACTURE GRADIENT AND MAXIMUM INJECTION PRESSURE

INJECTOR W1

Fracture gradient

A fracture pressure gradient of 0.76 psi/ft is assumed for the injection zone. This is based on formation integrity tests in the [REDACTED] conducted on wells - [REDACTED]. CTV will conduct a step rate test in the injection zone as part of the pre-operational testing plan to confirm this fracture pressure gradient.

Maximum Injection Pressure

CTV will ensure that the injection pressure is below 90% of the injection zone fracture gradient at the top of perforations in the injection well (Table 1). CTV expects to operate the wells with a planned bottom hole injection pressure well below the maximum allowable injection pressure calculated using the fracture gradient and safety factor.

Table 1: Maximum Injection pressure

Injection Pressure Details	Injection Well W1
Fracture gradient (psi/ft)	0.76
Maximum allowable injection pressure (90% of fracture pressure) (psi)	4207
Elevation corresponding to maximum injection pressure (ft TVD)	6155
Elevation at the top of the perforated interval (ft TVD)	6155